

# WEST

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## Search Results -

Terms	Documents
L3 and (rieping\$3 or bastuck\$3 or hermann\$3 or thierbach\$3).in.	8

Database: US Patents Full-Text Database ▲  
US Pre-Grant Publication Full-Text Database  
JPO Abstracts Database  
EPO Abstracts Database  
Derwent World Patents Index  
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## Search History

**DATE:** Thursday, July 24, 2003    [Printable Copy](#)    [Create Case](#)

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**Hit Count**   **Set Name**  
result set

*DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR*

<u>L5</u>	L3 and (rieping\$3 or bastuck\$3 or hermann\$3 or thierbach\$3).in.	8	<u>L5</u>
<u>L4</u>	L3 and rieping.in.	4	<u>L4</u>
<u>L3</u>	L2 same (threon\$5 or lysin\$5 or isoleuci\$5 or valin\$3)	18	<u>L3</u>
<u>L2</u>	L1 same (coli\$3 or glutamic\$5 or brevi\$10 or enterobacteri\$6)	67	<u>L2</u>
<u>L1</u>	(pep\$3 same carboxykinas\$5) or pcka\$3 or (phosphoenol\$10 same carboxykinas\$3)	575	<u>L1</u>

END OF SEARCH HISTORY

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**Search Results - Record(s) 1 through 8 of 8 returned.**☐ 1. Document ID: US 20030040103 A1

L5: Entry 1 of 8

File: PGPB

Feb 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030040103

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030040103 A1

TITLE: Fermentation process for the preparation of L-amino acids using strains of the family enterobacteriaceae

PUBLICATION-DATE: February 27, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
<u>Rieping, Mechthild</u>	Bielefeld		DE	
<u>Bastuck, Christine</u>	Bielefeld		DE	
<u>Hermann, Thomas</u>	Bielefeld		DE	
<u>Thierbach, Georg</u>	Bielefeld		DE	

US-CL-CURRENT: 435/252.3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. Desc
Image												

☐ 2. Document ID: US 20030017554 A1

L5: Entry 2 of 8

File: PGPB

Jan 23, 2003

PGPUB-DOCUMENT-NUMBER: 20030017554

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030017554 A1

TITLE: Process for the fermentative preparation of L-amino acids using strains of the enterobacteriaceae family

PUBLICATION-DATE: January 23, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
<u>Rieping, Mechthild</u>	Bielefeld		DE	
<u>Thierbach, Georg</u>	Bielefeld		DE	

US-CL-CURRENT: 435/106; 435/115, 435/116, 435/252.3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. Desc
Image												

☐ 3. Document ID: WO 229080 A2

L5: Entry 3 of 8

File: EPAB

Apr 11, 2002

PUB-NO: WO000229080A2

DOCUMENT-IDENTIFIER: WO 229080 A2

TITLE: FERMENTATION PROCESS FOR THE PREPARATION OF L-AMINO ACIDS USING STRAINS OF THE FAMILY ENTEROBACTERIACEAE

PUBN-DATE: April 11, 2002

## INVENTOR-INFORMATION:

NAME

COUNTRY

RIEPING, MECHTHILD

BASTUCK, CHRISTINE

HERMANN, THOMAS

THIERBACH, GEORG

INT-CL (IPC): C12 P 13/04; C12 P 13/08; C12 N 1/21; C12 N 15/11; C12 N 15/60

EUR-CL (EPC): C12P013/06; C12N015/52, C12P013/08 , C12R001/19

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Image									

KMCC	Draw Desc
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☐ 4. Document ID: WO 200227000 A1 AU 200195580 A DE 10047866 A1 US 20020086374 A1

L5: Entry 4 of 8

File: DWPI

Apr 4, 2002

DERWENT-ACC-NO: 2002-394241

DERWENT-WEEK: 200252

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TITLE: New polynucleotide from coryneform bacteria coding for dep67 gene, where overexpression of the gene provides improved production of L-amino acids particularly L-lysine in corynebacterium glutamicum

INVENTOR: BATHE, B; FARWICK, M ; HERMANN, T ; HUTHMACHER, K ; PFEFFERLE, W

PRIORITY-DATA: 2000DE-1047866 (September 27, 2000)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200227000 A1	April 4, 2002	E	042	C12N015/77
AU 200195580 A	April 8, 2002		000	C12N015/77
DE 10047866 A1	April 11, 2002		000	C12N001/21
US 20020086374 A1	July 4, 2002		000	C12P013/08

INT-CL (IPC): C07 H 21/00; C07 H 21/04; C07 K 14/34; C12 N 1/21; C12 N 5/10; C12 N 15/52; C12 N 15/74; C12 N 15/77; C12 P 13/04; C12 P 13/08; C12 P 21/02; C12 Q 1/68

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Image									

KMCC	Draw Desc
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☐ 5. Document ID: EP 1317547 A1 WO 200222828 A1 DE 10120095 A1 US 20020042105  
A1 AU 200182132 A

L5: Entry 5 of 8

File: DWPI

Jun 11, 2003

DERWENT-ACC-NO: 2002-351892

DERWENT-WEEK: 200339

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TITLE: New protein kinase B, *pknB* gene from *corynebacteria*, useful as hybridization probe and overexpression of which gene in *corynebacteria* is useful for producing L-amino acids, in particular L-lysine

INVENTOR: BATHE, B; FARWICK, M ; HANS, S ; HERMANN, T

PRIORITY-DATA: 2001DE-1020095 (April 25, 2001), 2000DE-1044912 (September 12, 2000)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 1317547 A1	June 11, 2003	E	000	C12N015/54
WO 200222828 A1	March 21, 2002	E	046	C12N015/54
DE 10120095 A1	March 28, 2002		000	C12N015/54
US 20020042105 A1	April 11, 2002		000	C12P013/04
AU 200182132 A	March 26, 2002		000	C12N015/54

INT-CL (IPC): C07 H 21/00; C07 H 21/04; C12 N 1/21; C12 N 9/00; C12 N 9/12; C12 N 15/54; C12 N 15/74; C12 P 13/04; C12 P 13/08; C12 Q 1/68

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KIMC	Draw Desc
Image											

☐ 6. Document ID: US 20030100080 A1 WO 200220806 A1 DE 10109685 A1 AU 200179755  
A EP 1315820 A1

L5: Entry 6 of 8

File: DWPI

May 29, 2003

DERWENT-ACC-NO: 2002-463087

DERWENT-WEEK: 200337

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TITLE: Novel *sahH* gene from *coryneform* bacteria useful as probe to isolate genes coding for adenosyl homocysteinase, and overexpression of which gene in *coryneform* bacteria is useful for producing amino acids, e.g. L-lysine

INVENTOR: BREHME, J; FARWICK, M ; HUTHMACHER, K ; PFEFFERLE, W ; BINDER, M ;  
GREISSINGER, D ; THIERBACH, G

PRIORITY-DATA: 2001DE-1009685 (February 28, 2001), 2000DE-1044706 (September 9, 2000)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 20030100080 A1	May 29, 2003		000	C12P013/04
WO 200220806 A1	March 14, 2002	E	053	C12N015/60
DE 10109685 A1	April 11, 2002		000	C12N015/55
AU 200179755 A	March 22, 2002		000	C12N015/60
EP 1315820 A1	June 4, 2003	E	000	C12N015/60

INT-CL (IPC): A23 K 1/00; A23 K 1/16; C07 H 21/04; C12 N 1/21; C12 N 9/88; C12 N

15/55; C12 N 15/60; C12 N 15/74; C12 N 15/77; C12 P 13/04; C12 P 13/08; C12 P 13/12;  
C12 P 21/02; C12 Q 1/68

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMCC	Draw Desc
Image											

☐ 7. Document ID: WO 200218599 A1 US 20020106755 A1 DE 10136984 A1 AU 200189850 A

L5: Entry 7 of 8

File: DWPI

Mar 7, 2002

DERWENT-ACC-NO: 2002-315544

DERWENT-WEEK: 200254

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TITLE: New sigM gene from coryneform bacteria useful as probe to isolate genes which code for sigma factor M, and overexpression of which gene in coryneform bacteria is useful for producing amino acids, especially L-lysine

INVENTOR: BASTUCK, C ; BATHE, B ; FARWICK, M ; HERMANN, T ; PFEFFERLE, W

PRIORITY-DATA: 2001DE-1036984 (July 28, 2001), 2000DE-1043337 (September 2, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200218599 A1	March 7, 2002	E	042	C12N015/31
US 20020106755 A1	August 8, 2002		000	C12P013/08
DE 10136984 A1	April 18, 2002		000	C12N015/11
AU 200189850 A	March 13, 2002		000	C12N015/31

INT-CL (IPC): C07 H 21/04; C12 N 1/21; C12 N 9/10; C12 N 15/11; C12 N 15/31; C12 N 15/74; C12 P 13/04; C12 P 13/08; C12 P 21/02; C12 Q 1/68; C12 R 1:19; C12 N 1/21

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMCC	Draw Desc
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☐ 8. Document ID: WO 200218598 A1 US 20020106756 A1 DE 10133427 A1 AU 200182084 A

L5: Entry 8 of 8

File: DWPI

Mar 7, 2002

DERWENT-ACC-NO: 2002-315543

DERWENT-WEEK: 200254

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TITLE: New sigH gene from coryneform bacteria useful as a probe to isolate genes which code for sigma factor H, and overexpression of which gene in coryneform bacteria is useful for producing amino acids, especially L-lysine

INVENTOR: BATHE, B; FARWICK, M ; HERMANN, T ; MARX, A ; PFEFFERLE, W ; RIEPING, M ; SCHROEDER, I ; SCHRODER, I

PRIORITY-DATA: 2001DE-1033427 (July 10, 2001), 2000DE-1043333 (September 2, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200218598 A1	March 7, 2002	E	045	C12N015/31
US 20020106756 A1	August 8, 2002		000	C12P013/08
DE 10133427 A1	March 14, 2002		000	C12N001/21
AU 200182084 A	March 13, 2002		000	C12N015/31

INT-CL (IPC): C07 H 21/00; C07 H 21/04; C07 K 14/34; C12 N 1/21; C12 N 9/10; C12 N 15/31; C12 N 15/52; C12 P 13/04; C12 P 13/08; C12 P 21/02; C12 Q 1/68

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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Terms	Documents
L3 and (rieping\$3 or bastuck\$3 or hermann\$3 or thierbach\$3).in.	8

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## WEST

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## Search Results - Record(s) 1 through 10 of 18 returned.

☐ 1. Document ID: US 20030087381 A1

L3: Entry 1 of 18

File: PGPB

May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087381

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030087381 A1

TITLE: Metabolically engineered organisms for enhanced production of oxaloacetate-derived biochemicals

PUBLICATION-DATE: May 8, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gokarn, Ravi R.	Plymouth	MN	US	
Eiteman, Mark A.	Athens	GA	US	
Altman, Elliot	Athens	GA	US	

US-CL-CURRENT: [435/69.1](#); [435/193](#), [435/252.3](#), [435/252.33](#), [435/320.1](#), [536/23.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	MMIC	Draw Desc
Image												

☐ 2. Document ID: US 20030040103 A1

L3: Entry 2 of 18

File: PGPB

Feb 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030040103

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030040103 A1

TITLE: Fermentation process for the preparation of L-amino acids using strains of the family enterobacteriaceae

PUBLICATION-DATE: February 27, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rieping, Mechthild	Bielefeld		DE	
Bastuck, Christine	Bielefeld		DE	
Hermann, Thomas	Bielefeld		DE	
Thierbach, Georg	Bielefeld		DE	

US-CL-CURRENT: [435/252.3](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw Desc
Image												

☐ 3. Document ID: US 20030017554 A1

L3: Entry 3 of 18

File: PGPB

Jan 23, 2003

PGPUB-DOCUMENT-NUMBER: 20030017554

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030017554 A1

TITLE: Process for the fermentative preparation of L-amino acids using strains of the enterobacteriaceae family

PUBLICATION-DATE: January 23, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rieping, Mechthild	Bielefeld		DE	
Thierbach, Georg	Bielefeld		DE	

US-CL-CURRENT: 435/106; 435/115, 435/116, 435/252.3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw Desc
Image											

☐ 4. Document ID: US 20020177566 A1

L3: Entry 4 of 18

File: PGPB

Nov 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020177566

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020177566 A1

TITLE: Nucleic acid sequences associated with baldness

PUBLICATION-DATE: November 28, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Pritchard, David	Seattle	WA	US	
Burmer, Glenna	Seattle	WA	US	
Brown, Joseph	Seattle	WA	US	
Demas, Vasiliki	Seattle	WA	US	

US-CL-CURRENT: 514/44; 424/70.1, 435/6, 435/7.21

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw Desc
Image											

☐ 5. Document ID: US 20020102589 A1

L3: Entry 5 of 18

File: PGPB

Aug 1, 2002



PGPUB-DOCUMENT-NUMBER: 20020102589  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020102589 A1

TITLE: Microarrays and methods for evaluating activity of compounds having estrogen-like activity

PUBLICATION-DATE: August 1, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kiyama, Ryoiti	Ibaraki		JP	
Oguchi, Shinobu	Tokyo		JP	

US-CL-CURRENT: 435/6; 702/20

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw Desc
Image											

☐ 6. Document ID: US 20020012939 A1

L3: Entry 6 of 18

File: PGPB

Jan 31, 2002

PGPUB-DOCUMENT-NUMBER: 20020012939  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020012939 A1

TITLE: Methods for identifying drug targets based on genomic sequence data

PUBLICATION-DATE: January 31, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Palsson, Bernhard	La Jolla	CA	US	

US-CL-CURRENT: 435/6; 435/34, 702/20

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw Desc
Image											

☐ 7. Document ID: US 20010055771 A1

L3: Entry 7 of 18

File: PGPB

Dec 27, 2001

PGPUB-DOCUMENT-NUMBER: 20010055771  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20010055771 A1

TITLE: Exploiting genomics in the search for new drugs

PUBLICATION-DATE: December 27, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lockhart, David J.	Del Mar	CA	US	
Wodicka, Lisa	San Diego	CA	US	
Ho, Ming Hsiu	San Jose	CA	US	

US-CL-CURRENT: 435/6; 536/24.3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMOC	Draw Desc
Image											

☐ 8. Document ID: US 6551795 B1

L3: Entry 8 of 18

File: USPT

Apr 22, 2003

US-PAT-NO: 6551795

DOCUMENT-IDENTIFIER: US 6551795 B1

TITLE: Nucleic acid and amino acid sequences relating to pseudomonas aeruginosa for diagnostics and therapeutics

DATE-ISSUED: April 22, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rubinfeld; Marc J.	Framingham	MA		
Nolling; Jork	Quincy	MA		
Deloughery; Craig	Medford	MA		
Bush; David	Somerville	MA		

US-CL-CURRENT: 435/69.1; 435/253.3, 435/320.1, 435/325, 435/6, 536/23.1, 536/23.7

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMOC	Draw Desc
Image											

☐ 9. Document ID: US 6524800 B2

L3: Entry 9 of 18

File: USPT

Feb 25, 2003

US-PAT-NO: 6524800

DOCUMENT-IDENTIFIER: US 6524800 B2

TITLE: Exploiting genomics in the search for new drugs

DATE-ISSUED: February 25, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lockhart; David J.	Del Mar	CA		
Wodicka; Lisa	San Diego	CA		
Ho; Ming Hsiu	San Jose	CA		

US-CL-CURRENT: 435/6; 435/287.2, 435/4, 435/7.1, 435/91.2, 536/23.1, 536/24.3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Image									

KMIC	Draw Desc
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☐ 10. Document ID: US 6455284 B1

L3: Entry 10 of 18

File: USPT

Sep 24, 2002

US-PAT-NO: 6455284

DOCUMENT-IDENTIFIER: US 6455284 B1

TITLE: Metabolically engineered E. coli for enhanced production of oxaloacetate-derived biochemicals

DATE-ISSUED: September 24, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gokarn; Ravi R.	Plymouth	MN		
Eiteman; Mark A.	Athens	GA		
Altman; Elliot	Athens	GA		

US-CL-CURRENT: 435/71.2; 435/41, 435/45, 435/71.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Image									

KMIC	Draw Desc
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Terms	Documents
L2 same (threon\$5 or lysin\$5 or isoleuci\$5 or valin\$3)	18

**Display Format:**[Change Format](#)[Previous Page](#)[Next Page](#)

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## Search Results - Record(s) 11 through 18 of 18 returned.

☐ 11. Document ID: US 6333155 B1

L3: Entry 11 of 18

File: USPT

Dec 25, 2001

US-PAT-NO: 6333155

DOCUMENT-IDENTIFIER: US 6333155 B1

TITLE: Exploiting genomics in the search for new drugs

DATE-ISSUED: December 25, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lockhart; David J.	Del Mar	CA		
Wodicka; Lisa	San Diego	CA		
Ho; Ming Hsiu	San Jose	CA		

US-CL-CURRENT: 435/6; 435/91.2, 536/23.1, 536/24.3, 536/24.31, 536/24.33

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">KIMC</a>	<a href="#">Draw. Desc</a>
<a href="#">Image</a>												

☐ 12. Document ID: WO 229080 A2

L3: Entry 12 of 18

File: EPAB

Apr 11, 2002

PUB-NO: WO000229080A2

DOCUMENT-IDENTIFIER: WO 229080 A2

TITLE: FERMENTATION PROCESS FOR THE PREPARATION OF L-AMINO ACIDS USING STRAINS OF THE FAMILY ENTEROBACTERIACEAE

PUBN-DATE: April 11, 2002

## INVENTOR-INFORMATION:

NAME	COUNTRY
RIEPING, MECHTHILD	
BASTUCK, CHRISTINE	
HERMANN, THOMAS	
THIERBACH, GEORG	

INT-CL (IPC): C12 P 13/04; C12 P 13/08; C12 N 1/21; C12 N 15/11; C12 N 15/60EUR-CL (EPC): C12P013/06; C12N015/52, C12P013/08 , C12R001/19

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">KIMC</a>	<a href="#">Draw. Desc</a>
<a href="#">Image</a>											

☐ 13. Document ID: WO 200227000 A1 AU 200195580 A DE 10047866 A1 US 20020086374 A1

L3: Entry 13 of 18

File: DWPI

Apr 4, 2002

DERWENT-ACC-NO: 2002-394241

DERWENT-WEEK: 200252

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TITLE: New polynucleotide from coryneform bacteria coding for dep67 gene, where overexpression of the gene provides improved production of L-amino acids particularly L-lysine in corynebacterium glutamicum

INVENTOR: BATHE, B; FARWICK, M ; HERMANN, T ; HUTHMACHER, K ; PFEFFERLE, W

PRIORITY-DATA: 2000DE-1047866 (September 27, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200227000 A1	April 4, 2002	E	042	C12N015/77
AU 200195580 A	April 8, 2002		000	C12N015/77
DE 10047866 A1	April 11, 2002		000	C12N001/21
US 20020086374 A1	July 4, 2002		000	C12P013/08

INT-CL (IPC): C07 H 21/00; C07 H 21/04; C07 K 14/34; C12 N 1/21; C12 N 5/10; C12 N 15/52; C12 N 15/74; C12 N 15/77; C12 P 13/04; C12 P 13/08; C12 P 21/02; C12 Q 1/68

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw Desc
Image											

☐ 14. Document ID: EP 1317547 A1 WO 200222828 A1 DE 10120095 A1 US 20020042105 A1 AU 200182132 A

L3: Entry 14 of 18

File: DWPI

Jun 11, 2003

DERWENT-ACC-NO: 2002-351892

DERWENT-WEEK: 200339

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TITLE: New protein kinase B, pknB gene from corynebacteria, useful as hybridization probe and overexpression of which gene in corynebacteria is useful for producing L-amino acids, in particular L-lysine

INVENTOR: BATHE, B; FARWICK, M ; HANS, S ; HERMANN, T

PRIORITY-DATA: 2001DE-1020095 (April 25, 2001), 2000DE-1044912 (September 12, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 1317547 A1	June 11, 2003	E	000	C12N015/54
WO 200222828 A1	March 21, 2002	E	046	C12N015/54
DE 10120095 A1	March 28, 2002		000	C12N015/54
US 20020042105 A1	April 11, 2002		000	C12P013/04
AU 200182132 A	March 26, 2002		000	C12N015/54

INT-CL (IPC): C07 H 21/00; C07 H 21/04; C12 N 1/21; C12 N 9/00; C12 N 9/12; C12 N 15/54; C12 N 15/74; C12 P 13/04; C12 P 13/08; C12 Q 1/68

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMCC	Draw Desc
Image											

☐ 15. Document ID: US 20030100080 A1 WO 200220806 A1 DE 10109685 A1 AU  
200179755 A EP 1315820 A1

L3: Entry 15 of 18

File: DWPI

May 29, 2003

DERWENT-ACC-NO: 2002-463087

DERWENT-WEEK: 200337

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TITLE: Novel sahH gene from coryneform bacteria useful as probe to isolate genes coding for adenosyl homocysteinase, and overexpression of which gene in coryneform bacteria is useful for producing amino acids, e.g. L-lysine

INVENTOR: BREHME, J; FARWICK, M ; HUTHMACHER, K ; PFEFFERLE, W ; BINDER, M ;  
GREISSINGER, D ; THIERBACH, G

PRIORITY-DATA: 2001DE-1009685 (February 28, 2001), 2000DE-1044706 (September 9, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 20030100080 A1	May 29, 2003		000	C12P013/04
WO 200220806 A1	March 14, 2002	E	053	C12N015/60
DE 10109685 A1	April 11, 2002		000	C12N015/55
AU 200179755 A	March 22, 2002		000	C12N015/60
EP 1315820 A1	June 4, 2003	E	000	C12N015/60

INT-CL (IPC): A23 K 1/00; A23 K 1/16; C07 H 21/04; C12 N 1/21; C12 N 9/88; C12 N 15/55; C12 N 15/60; C12 N 15/74; C12 N 15/77; C12 P 13/04; C12 P 13/08; C12 P 13/12; C12 P 21/02; C12 Q 1/68

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMCC	Draw Desc
Image											

☐ 16. Document ID: WO 200220771 A2 US 20020106672 A1 DE 10108838 A1 AU  
200179804 A

L3: Entry 16 of 18

File: DWPI

Mar 14, 2002

DERWENT-ACC-NO: 2002-351778

DERWENT-WEEK: 200254

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TITLE: Novel polynucleotide from Coryneform bacteria coding for hisC2 gene, useful as hybridization probe for detecting DNA to isolate nucleic acids, polynucleotides or genes coding for transcription regulator hisC2

INVENTOR: BATHE, B; FARWICK, M ; HUTHMACHER, K ; PFEFFERLE, W

PRIORITY-DATA: 2001DE-1008838 (February 23, 2001), 2000DE-1044709 (September 9, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200220771 A2	March 14, 2002	E	036	C12N015/10
US 20020106672 A1	August 8, 2002		000	C12Q001/68
DE 10108838 A1	April 4, 2002		000	C12N015/54
AU 200179804 A	March 22, 2002		000	C12N015/10

INT-CL (IPC): C07 H 21/04; C12 N 1/21; C12 N 9/10; C12 N 15/10; C12 N 15/54; C12 N 15/77; C12 P 13/04; C12 P 13/08; C12 P 21/02; C12 Q 1/68

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw Desc
Image											

☐ 17. Document ID: WO 200218599 A1 US 20020106755 A1 DE 10136984 A1 AU 200189850 A

L3: Entry 17 of 18

File: DWPI

Mar 7, 2002

DERWENT-ACC-NO: 2002-315544

DERWENT-WEEK: 200254

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TITLE: New sigM gene from coryneform bacteria useful as probe to isolate genes which code for sigma factor M, and overexpression of which gene in coryneform bacteria is useful for producing amino acids, especially L-lysine

INVENTOR: BASTUCK, C; BATHE, B ; FARWICK, M ; HERMANN, T ; PFEFFERLE, W

PRIORITY-DATA: 2001DE-1036984 (July 28, 2001), 2000DE-1043337 (September 2, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200218599 A1	March 7, 2002	E	042	C12N015/31
US 20020106755 A1	August 8, 2002		000	C12P013/08
DE 10136984 A1	April 18, 2002		000	C12N015/11
AU 200189850 A	March 13, 2002		000	C12N015/31

INT-CL (IPC): C07 H 21/04; C12 N 1/21; C12 N 9/10; C12 N 15/11; C12 N 15/31; C12 N 15/74; C12 P 13/04; C12 P 13/08; C12 P 21/02; C12 Q 1/68; C12 R 1/19; C12 N 1/21

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw Desc
Clip Img	Image										

☐ 18. Document ID: WO 200218598 A1 US 20020106756 A1 DE 10133427 A1 AU 200182084 A

L3: Entry 18 of 18

File: DWPI

Mar 7, 2002

DERWENT-ACC-NO: 2002-315543

DERWENT-WEEK: 200254

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TITLE: New sigH gene from coryneform bacteria useful as a probe to isolate genes which code for sigma factor H, and overexpression of which gene in coryneform bacteria is useful for producing amino acids, especially L-lysine

INVENTOR: BATHE, B; FARWICK, M ; HERMANN, T ; MARX, A ; PFEFFERLE, W ; RIEPING, M ;

SCHROEDER, I ; SCHRODER, I

PRIORITY-DATA: 2001DE-1033427 (July 10, 2001), 2000DE-1043333 (September 2, 2000)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200218598 A1	March 7, 2002	E	045	C12N015/31
US 20020106756 A1	August 8, 2002		000	C12P013/08
DE 10133427 A1	March 14, 2002		000	C12N001/21
AU 200182084 A	March 13, 2002		000	C12N015/31

INT-CL (IPC): C07 H 21/00; C07 H 21/04; C07 K 14/34; C12 N 1/21; C12 N 9/10; C12 N 15/31; C12 N 15/52; C12 P 13/04; C12 P 13/08; C12 P 21/02; C12 Q 1/68

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Clip Img	Image								

KM/C	Draw Desc
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Terms	Documents
L2 same (threon\$5 or lysin\$5 or isoleuci\$5 or valin\$3)	18

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NEWS	4	Feb 24	TEMA now available on STN
NEWS	5	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS	6	Feb 26	PCTFULL now contains images
NEWS	7	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS	8	Mar 24	PATDPAFULL now available on STN
NEWS	9	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS	10	Apr 11	Display formats in DGENE enhanced
NEWS	11	Apr 14	MEDLINE Reload
NEWS	12	Apr 17	Polymer searching in REGISTRY enhanced
NEWS	13	Jun 13	Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS	14	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS	15	Apr 28	RDISCLOSURE now available on STN
NEWS	16	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS	17	May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS	18	May 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS	19	May 19	Simultaneous left and right truncation added to WSCA
NEWS	20	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS	21	Jun 06	Simultaneous left and right truncation added to CBNB
NEWS	22	Jun 06	PASCAL enhanced with additional data
NEWS	23	Jun 20	2003 edition of the FSTA Thesaurus is now available
NEWS	24	Jun 25	HSDB has been reloaded
NEWS	25	Jul 16	Data from 1960-1976 added to RDISCLOSURE
NEWS	26	Jul 21	Identification of STN records implemented
NEWS	27	Jul 21	Polymer class term count added to REGISTRY
NEWS	28	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
NEWS EXPRESS			April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
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FILE 'HOME' ENTERED AT 12:22:46 ON 24 JUL 2003

=> index bioscience medicine

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCCommerce, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 12:23:16 ON 24 JUL 2003

70 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view  
search error messages that display as 0\* with SET DETAIL OFF.

=> s (pep? (s) carboxykinas?) or (phosphoenol?(s)carboxikinas?)

3	FILE ADISCTI
3	FILE ADISINSIGHT
1	FILE ADISNEWS
70	FILE AGRICOLA
64	FILE AQUASCI
7	FILE BIOBUSINESS
1033	FILE BIOSIS
51	FILE BIOTECHABS
51	FILE BIOTECHDS
384	FILE BIOTECHNO
349	FILE CABA
170	FILE CANCERLIT
1163	FILE CAPLUS
3	FILE CEABA-VTB
1	FILE CIN
17	FILE CONFSCI
2	FILE CROPU

21 FILES SEARCHED...

1	FILE DDFB
55	FILE DDFU
253	FILE DGENE
1	FILE DRUGB
2	FILE DRUGNL
63	FILE DRUGU
1	FILE DRUGUPDATES
8	FILE EMBAL
693	FILE EMBASE
342	FILE ESBIODASE
22*	FILE FEDRIP

34 FILES SEARCHED...

1	FILE FROSTI
8	FILE FSTA
260	FILE GENBANK
2	FILE HEALSAFE
28	FILE IFIPAT
21	FILE JICST-EPLUS
315	FILE LIFESCI
776	FILE MEDLINE
25	FILE NIOSHTIC
3	FILE NTIS
22	FILE OCEAN
247	FILE PASCAL
1	FILE PHAR
2	FILE PROMT

# 58 FILES SEARCHED...

```

641  FILE SCISEARCH
351  FILE TOXCENTER
153  FILE USPATFULL
6    FILE USPAT2
4    FILE VETU
12   FILE WPIDS
12   FILE WPINDEX

```

49 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L1 QUE (PEP? (S) CARBOXYKINAS?) OR (PHOSPHOENOL?(S) CARBOXIKINAS?)

=> d rannk

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=> d rank

```

F1      1163  CAPLUS
F2      1033  BIOSIS
F3       776  MEDLINE
F4       693  EMBASE
F5       641  SCISEARCH
F6       384  BIOTECHNO
F7       351  TOXCENTER
F8       349  CABA
F9       342  ESBIODBASE
F10      315  LIFESCI
F11      260  GENBANK
F12      253  DGENE
F13      247  PASCAL
F14      170  CANCERLIT
F15      153  USPATFULL
F16       70  AGRICOLA
F17       64  AQUASCI
F18       63  DRUGU
F19       55  DDFU
F20       51  BIOTECHABS
F21       51  BIOTECHDS
F22       28  IFIPAT
F23       25  NIOSHTIC
F24       22  OCEAN
F25      22*  FEDRIP
F26       21  JICST-EPLUS
F27       17  CONFSCI
F28       12  WPIDS
F29       12  WPINDEX
F30        8  EMBAL
F31        8  FSTA
F32        7  BIOBUSINESS
F33        6  USPAT2
F34        4  VETU
F35        3  ADISCTI
F36        3  ADISINSIGHT
F37        3  CEABA-VTB
F38        3  NTIS
F39        2  CROPU
F40        2  DRUGNL
F41        2  HEALSAFE
F42        2  PROMT
F43        1  ADISNEWS
F44        1  CIN
F45        1  DDFB

```

F46 1 DRUGB  
F47 1 DRUGUPDATES  
F48 1 FROSTI  
F49 1 PHAR

=> file f1-f15

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SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

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3.51

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=> s (pep? (s) carboxykinas?) or (phosphoenol?(s)carboxykinas?) or pcka?  
13 FILES SEARCHED...

L2 7490 (PEP? (S) CARBOXYKINAS?) OR (PHOSPHOENOL?(S) CARBOXIKINAS?) OR PCKA?

=> s l2 (s) (coli? or enterobacter? or glutamicu? or coryne?)

L3 434 L2 (S) (COLI? OR ENTEROBACTER? OR GLUTAMICU? OR CORYNE?)

=> s l3 (s) (amino? or threon? or valin? or isoleuc? or lysin?)

7 FILES SEARCHED...

13 FILES SEARCHED...

L4 175 L3 (S) (AMINO? OR THREON? OR VALIN? OR ISOLEUC? OR LYSIN?)

=> dup rem l4

DUPLICATE IS NOT AVAILABLE IN 'GENBANK, DGENE'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE

PROCESSING COMPLETED FOR L4

L5 108 DUP REM L4 (67 DUPLICATES REMOVED)

=> d ti l5 1-108

L5 ANSWER 1 OF 108 CAPLUS COPYRIGHT 2003 ACS on STNDUPLICATE 1

TI Genetically modified *Escherichia coli* for the fermentative production of threonine containing an attenuated *aceK* gene

L5 ANSWER 2 OF 108 CAPLUS COPYRIGHT 2003 ACS on STNDUPLICATE 2

TI Genetically modified *Escherichia coli* for the fermentative production of threonine containing an attenuated *aceB* gene

L5 ANSWER 3 OF 108 CAPLUS COPYRIGHT 2003 ACS on STNDUPLICATE 3

TI Genetically modified *Escherichia coli* for the fermentative production of threonine containing an attenuated *aspA* gene

L5 ANSWER 4 OF 108 CAPLUS COPYRIGHT 2003 ACS on STNDUPLICATE 4

TI Genetically modified *Escherichia coli* for the fermentative production of threonine containing an attenuated *ugpB* gene

L5 ANSWER 5 OF 108 CAPLUS COPYRIGHT 2003 ACS on STNDUPLICATE 5

TI Improvement of *Corynebacterium glutamicum* amino acid production by site-directed deletion of *pck* (PEP carboxykinase) gene

L5 ANSWER 6 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN

TI Biosynthetic preparation of non-aromatic L-amino acids in Enterobacteriaceae bacteria

L5 ANSWER 7 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN

TI Genetically modified *Escherichia coli* overexpressing genes *iclR* and *fadR* for fermentative prodn. of threonine

L5 ANSWER 8 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN

TI Genetically modified *Escherichia coli* overexpressing genes *sucC* and *sucD* for the fermentative production of threonine

L5 ANSWER 9 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN

TI Genetically modified *Escherichia coli* overexpressing genes *sucA* and *sucB* for the fermentative production of threonine

L5 ANSWER 10 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN

TI Genetically modified *Escherichia coli* overexpressing gene *sodA* for the fermentative production of threonine

L5 ANSWER 11 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN

TI Genetically modified *Escherichia coli* overexpressing genes *rseA* or *rseC* for the fermentative production of threonine

L5 ANSWER 12 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN

TI Genetically modified *Escherichia coli* overexpressing gene talB for the fermentative production of threonine  
 L5 ANSWER 13 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing gene pfkB for the fermentative production of threonine  
 L5 ANSWER 14 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing gene pykF for the fermentative production of threonine  
 L5 ANSWER 15 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing gene phoE for the fermentative production of threonine  
 L5 ANSWER 16 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* for the fermentative production of threonine  
 L5 ANSWER 17 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing genes phoB and phoR for the fermentative production of threonine  
 L5 ANSWER 18 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing gene malE for the fermentative production of threonine  
 L5 ANSWER 19 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing genes of the cysteine biosynthesis pathway for the fermentative production of threonine  
 L5 ANSWER 20 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing gene dps for the fermentative production of threonine  
 L5 ANSWER 21 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing genes crr, ptsH, and ptsI for the fermentative production of threonine  
 L5 ANSWER 22 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing gene hns for the fermentative production of threonine  
 L5 ANSWER 23 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing gene ptsG for the fermentative production of threonine  
 L5 ANSWER 24 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing gene mopB for the fermentative production of threonine  
 L5 ANSWER 25 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing gene lrp for the fermentative production of threonine  
 L5 ANSWER 26 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing gene fba for the fermentative production of threonine  
 L5 ANSWER 27 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* overexpressing genes ahpC and ahpF for the fermentative production of threonine  
 L5 ANSWER 28 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Genetically modified *Escherichia coli* strains for the fermentative

production of threonine

- L5 ANSWER 29 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Genetically modified *Escherichia coli* overexpressing gene *pgm* for the fermentative production of threonine
- L5 ANSWER 30 OF 108 USPATFULL on STN  
TI Metabolically engineered organisms for enhanced production of oxaloacetate-derived biochemicals
- L5 ANSWER 31 OF 108 USPATFULL on STN  
TI Human lyases and associated proteins
- L5 ANSWER 32 OF 108 USPATFULL on STN  
TI Identification of modulatory molecules using inducible promoters
- L5 ANSWER 33 OF 108 USPATFULL on STN  
TI Novel human genes and gene expression products I
- L5 ANSWER 34 OF 108 USPATFULL on STN  
TI Fermentation process for the preparation of L-amino acids using strains of the family *enterobacteriaceae*
- L5 ANSWER 35 OF 108 USPATFULL on STN  
TI Process for the fermentative preparation of L-amino acids using strains of the *enterobacteriaceae* family
- L5 ANSWER 36 OF 108 USPATFULL on STN  
TI Nucleic acid and amino acid sequences relating to *Acinetobacter baumannii* for diagnostics and therapeutics
- L5 ANSWER 37 OF 108 USPATFULL on STN  
TI *Chlamydia pneumoniae* polynucleotides and uses thereof
- L5 ANSWER 38 OF 108 USPATFULL on STN  
TI Nucleic acid and amino acid sequences relating to *pseudomonas aeruginosa* for diagnostics and therapeutics
- L5 ANSWER 39 OF 108 USPATFULL on STN  
TI Nucleotide sequence of the *Haemophilus influenzae* Rd genome, fragments thereof, and uses thereof
- L5 ANSWER 40 OF 108 USPATFULL on STN  
TI Methods for the inhibition of epstein-barr virus transmission employing anti-viral peptides capable of abrogating viral fusion and transmission
- L5 ANSWER 41 OF 108 USPATFULL on STN  
TI Nucleotide sequence of the *Haemophilus influenzae* Rd genome, fragments thereof, and uses thereof
- L5 ANSWER 42 OF 108 CAPLUS COPYRIGHT 2003 ACS on STNDUPLICATE 6  
TI Fermentation process for the preparation of L-amino acids using recombinant strains of the family *Enterobacteriaceae*
- L5 ANSWER 43 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Production of L-amino acids *Enterobacteriaceae* strains containing an attenuated *aceA* gene
- L5 ANSWER 44 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Production of L-amino acids with *Enterobacteriaceae* strains containing an attenuated *dgsA* gene
- L5 ANSWER 45 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Deletion of *E. coli fruR* gene encoding ribonucleic acid formation factors for L-Threonine biosynthesis

L5 ANSWER 46 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Sequence of pepC gene from corynebacteria and use thereof in synthesis of L-lysine

L5 ANSWER 47 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Use of ptsH gene of Corynebacterium glutamicum for L-lysine biosynthesis

L5 ANSWER 48 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Nucleotide sequences coding for the genes sucC and sucD

L5 ANSWER 49 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Fermentative production of L-amino acids with poxB mutants of Enterobacteriaceae

L5 ANSWER 50 OF 108 USPATFULL on STN  
 TI Novel Polynucleotides

L5 ANSWER 51 OF 108 USPATFULL on STN  
 TI NEW NUCLEOTIDE SEQUENCES WHICH CODE FOR PCK GENE

L5 ANSWER 52 OF 108 USPATFULL on STN  
 TI Expressed sequences of arabidopsis thaliana

L5 ANSWER 53 OF 108 USPATFULL on STN  
 TI Escherichia coli csrB gene, RNA encoded thereby, and methods of use thereof

L5 ANSWER 54 OF 108 USPATFULL on STN  
 TI Methods for identifying drug targets based on genomic sequence data

L5 ANSWER 55 OF 108 USPATFULL on STN  
 TI Methods for inhibition of membrane fusion-associated events, including respiratory syncytial virus transmission

L5 ANSWER 56 OF 108 USPATFULL on STN  
 TI Metabolically engineered E. coli for enhanced production of oxaloacetate-derived biochemicals

L5 ANSWER 57 OF 108 USPATFULL on STN  
 TI Materials and methods for the production of D-phenylalanine

L5 ANSWER 58 OF 108 USPATFULL on STN  
 TI Computer readable genomic sequence of Haemophilus influenzae Rd, fragments thereof, and uses thereof

L5 ANSWER 59 OF 108 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 DUPLICATE 7  
 TI Metabolic flux responses to pyruvate kinase knockout in Escherichia coli.

L5 ANSWER 60 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI The sucC and sucD genes of Corynebacterium glutamicum and their use in increasing yields of lysine in fermentation

L5 ANSWER 61 OF 108 CAPLUS COPYRIGHT 2003 ACS on STN  
 TI Isolation of nucleotide sequences encoding PEP carboxykinase

L5 ANSWER 62 OF 108 USPATFULL on STN  
 TI Escherichia coli csrA gene, protein encoded thereby, and methods of use thereof

L5 ANSWER 63 OF 108 USPATFULL on STN  
 TI Human respiratory syncytial virus peptides with antifusogenic and antiviral activities



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TI Escherichia coli CSR gene and RNA encoded thereby

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DUPLICATE 8  
TI Crystal structure of the dimeric phosphoenolpyruvate carboxykinase (PEPCK) from Trypanosoma cruzi at 2 Å resolution.

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DUPLICATE 9  
TI Characterization of the phosphoenolpyruvate carboxykinase gene from Corynebacterium glutamicum and significance of the enzyme for growth and amino acid production

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DUPLICATE 10  
TI Metabolic consequences of altered phosphoenolpyruvate carboxykinase activity in Corynebacterium glutamicum reveal anaplerotic regulation mechanisms in vivo

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DUPLICATE 11  
TI Molecular modeling of the complexes between Saccharomyces cerevisiae phosphoenolpyruvate carboxykinase and the ATP analogs pyridoxal 5'-diphosphoadenosine and pyridoxal 5'-triphosphoadenosine. Specific labeling of lysine 290.

L5 ANSWER 69 OF 108 LIFESCI COPYRIGHT 2003 CSA on STN  
TI Utilizing Succinic Acid as a Glucose Adjunct in Fed-Batch Fermentation: Is Butane a Feedstock Option in Microbe-Catalyzed Synthesis?

L5 ANSWER 70 OF 108 USPATFULL on STN  
TI Escherichia coli csrA gene, protein encoded thereby, and methods of use thereof

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DUPLICATE 12  
TI Identification of reactive conserved histidines in phosphoenolpyruvate carboxykinases from Escherichia coli and Saccharomyces cerevisiae.

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TI Identification of reactive conserved histidines in phosphoenolpyruvate carboxykinases from Escherichia coli and Saccharomyces cerevisiae

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DUPLICATE 13  
TI Identification of reactive lysines in phosphoenolpyruvate carboxykinases from Escherichia coli and Saccharomyces cerevisiae.

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DUPLICATE 14  
TI Effects of phosphoenolpyruvate carboxylase deficiency on metabolism and lysine production in Corynebacterium glutamicum.

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DUPLICATE 15  
TI Regulation of phospho(enol)-pyruvate-and oxaloacetate-converting enzymes in Corynebacterium glutamicum.

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DUPLICATE 16  
TI Identification and molecular characterization of csrA, a pleiotropic gene from Escherichia coli that affects glycogen biosynthesis, gluconeogenesis, cell size, and surface properties.

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DUPLICATE 17

TI    Reactivity of cysteinyl, arginyl, and lysyl residues of Escherichia coli phosphoenolpyruvate carboxykinase against group-specific chemical reagents.

L5    ANSWER 78 OF 108    CAPLUS    COPYRIGHT 2003 ACS on STN  
 TI    Phosphoenolpyruvate carboxylase in Corynebacterium glutamicum is dispensable for growth and lysine production

L5    ANSWER 79 OF 108    BIOSIS    COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 DUPLICATE 19  
 TI    Ascaris suum: Cloning of a cDNA encoding phosphoenolpyruvate carboxykinase.

L5    ANSWER 80 OF 108    BIOSIS    COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 DUPLICATE 20  
 TI    CLONING OF A CDNA ENCODING PHOSPHOENOLPYRUVATE CARBOXYKINASE FROM HAEMONCHUS-CONTORTUS.

L5    ANSWER 81 OF 108    BIOSIS    COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
 DUPLICATE 21  
 TI    SITE-DIRECTED MUTAGENESIS AND DNA SEQUENCE OF PCKA OF RHIZOBIUM NGR234 ENCODING PHOSPHOENOLPYRUVATE CARBOXYKINASE GLUCONEOGENESIS AND HOST-DEPENDENT SYMBIOTIC PHENOTYPE.

L5    ANSWER 82 OF 108    SCISEARCH    COPYRIGHT 2003 THOMSON ISI on STN  
 TI    SITE-DIRECTED MUTAGENESIS AND DNA-SEQUENCE OF PCKA OF RHIZOBIUM NGR234, ENCODING PHOSPHOENOLPYRUVATE CARBOXYKINASE - GLUCONEOGENESIS AND HOST-DEPENDENT SYMBIOTIC PHENOTYPE

L5    ANSWER 83 OF 108            GENBANK.RTM.    COPYRIGHT 2003 on STN  
 TITLE (TI):                    The complete genome sequence of Mycobacterium bovis  
 TITLE (TI):                    Direct Submission

L5    ANSWER 84 OF 108            GENBANK.RTM.    COPYRIGHT 2003 on STN  
 TITLE (TI):                    Direct Submission

L5    ANSWER 85 OF 108            GENBANK.RTM.    COPYRIGHT 2003 on STN  
 TITLE (TI):                    Complete genome sequence of a multiple drug resistant  
 Salmonella enterica serovar Typhi CT18  
 TITLE (TI):                    Direct Submission

L5    ANSWER 86 OF 108            GENBANK.RTM.    COPYRIGHT 2003 on STN  
 TITLE (TI):                    Genome sequence of Yersinia pestis, the causative agent  
 of plague  
 TITLE (TI):                    Direct Submission

L5    ANSWER 87 OF 108            GENBANK.RTM.    COPYRIGHT 2003 on STN  
 TITLE (TI):                    The genome sequence of the food-borne pathogen  
 Campylobacter jejuni reveals hypervariable sequences  
 TITLE (TI):                    Direct Submission

L5    ANSWER 88 OF 108    DGENE    COPYRIGHT 2003 THOMSON DERWENT on STN  
 TI    Fermentative production of amino acids in Enterobacteriaceae, useful e.g. in animal nutrition, improved by suppression of specific genes    -

L5    ANSWER 89 OF 108    DGENE    COPYRIGHT 2003 THOMSON DERWENT on STN  
 TI    Fermentative production of amino acids in Enterobacteriaceae, useful e.g. in animal nutrition, improved by suppression of specific genes    -

L5    ANSWER 90 OF 108    DGENE    COPYRIGHT 2003 THOMSON DERWENT on STN

[illegible]

in animal nutrition, improved by suppression of specific genes -

L5 ANSWER 107 OF 108 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN  
TI Preparation of amino acid - which does not react with transaminase

L5 ANSWER 108 OF 108 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN  
TI Preparation of amino acid - which does not react with transaminase

=> d his

(FILE 'HOME' ENTERED AT 12:22:46 ON 24 JUL 2003)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,  
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,  
CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,  
DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 12:23:16 ON  
24 JUL 2003

SEA (PEP? (S) CARBOXYKINAS?) OR (PHOSPHOENOL?(S) CARBOXIKINAS?)

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3 FILE ADISCTI  
3 FILE ADISINSIGHT  
1 FILE ADISNEWS  
70 FILE AGRICOLA  
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7 FILE BIOBUSINESS  
1033 FILE BIOSIS  
51 FILE BIOTECHABS  
51 FILE BIOTECHDS  
384 FILE BIOTECHNO  
349 FILE CABA  
170 FILE CANCERLIT  
1163 FILE CAPLUS  
3 FILE CEABA-VTB  
1 FILE CIN  
17 FILE CONFSCI  
2 FILE CROPU  
1 FILE DDFB  
55 FILE DDFU  
253 FILE DGENE  
1 FILE DRUGB  
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8 FILE EMBAL  
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22\* FILE FEDRIP  
1 FILE FROSTI  
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260 FILE GENBANK  
2 FILE HEALSAFE  
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21 FILE JICST-EPLUS  
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776 FILE MEDLINE  
25 FILE NIOSHTIC  
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247 FILE PASCAL  
1 FILE PHAR  
2 FILE PROMT  
641 FILE SCISEARCH  
351 FILE TOXCENTER  
153 FILE USPATFULL

6 FILE USPAT2  
4 FILE VETU  
12 FILE WPIDS  
12 FILE WPINDEX

L1 QUE (PEP? (S) CARBOXYKINAS?) OR (PHOSPHOENOL?(S) CARBOXIKINAS?)  
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FILE 'CAPLUS, BIOSIS, MEDLINE, EMBASE, SCISEARCH, BIOTECHNO, TOXCENTER,  
CABA, ESBIODBASE, LIFESCI, GENBANK, DGENE, PASCAL, CANCERLIT, USPATFULL'  
ENTERED AT 12:26:55 ON 24 JUL 2003

L2 7490 S (PEP? (S) CARBOXYKINAS?) OR (PHOSPHOENOL?(S) CARBOXIKINAS?) OR  
L3 434 S L2 (S) (COLI? OR ENTEROBACTER? OR GLUTAMICU? OR CORYNE?)  
L4 175 S L3 (S) (AMINO? OR THREON? OR VALIN? OR ISOLEUC? OR LYSIN?)  
L5 108 DUP REM L4 (67 DUPLICATES REMOVED)

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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
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FULL ESTIMATED COST

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INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 12:23:16 ON 24 JUL 2003

SEA (PEP? (S) CARBOXYKINAS?) OR (PHOSPHOENOL?(S)CARBOXIKINAS?)

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3 FILE ADISCTI  
3 FILE ADISINSIGHT  
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63 FILE DRUGU  
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8 FILE EMBAL  
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22\* FILE FEDRIP  
1 FILE FROSTI  
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25 FILE NIOSHTIC  
3 FILE NTIS  
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1 FILE PHAR  
2 FILE PROMT  
641 FILE SCISEARCH  
351 FILE TOXCENTER  
153 FILE USPATFULL  
6 FILE USPAT2  
4 FILE VETU  
12 FILE WPIDS  
12 FILE WPINDEX

L1 QUE (PEP? (S) CARBOXYKINAS?) OR (PHOSPHOENOL?(S) CARBOXIKINAS?)

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FILE 'CAPLUS, BIOSIS, MEDLINE, EMBASE, SCISEARCH, BIOTECHNO, TOXCENTER, CABA, ESBIODBASE, LIFESCI, GENBANK, DGENE, PASCAL, CANCERLIT, USPATFULL' ENTERED AT 12:26:55 ON 24 JUL 2003

L2 7490 S (PEP? (S) CARBOXYKINAS?) OR (PHOSPHOENOL?(S)CARBOXIKINAS?) OR  
L3 434 S L2 (S) (COLI? OR ENTEROBACTER? OR GLUTAMICU? OR CORYNE?)  
L4 175 S L3 (S) (AMINO? OR THREON? OR VALIN? OR ISOLEUC? OR LYSIN?)

L5 108 DUP REM L4 (67 DUPLICATES REMOVED)

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10/114073

L7: Entry 13 of 24

File: PGPB

Mar 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030049803  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030049803 A1

TITLE: Process for the production of L-amino acids using strains of the family enterobacteriaceae that contain an attenuated fruR gene

PUBLICATION-DATE: March 13, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rieping, Mechthild	Bielefeld		DE	
Hermann, Thomas	Bielefeld		DE	

US-CL-CURRENT: 435/106; 435/252.3

## CLAIMS:

What is claimed is:

*fructose repressor  
Jahreis 1991*

1. A process for the production of an L-amino acid, comprising: (a) fermenting a microorganism of the family Enterobacteriaceae which produces the desired L-amino acid, in which the fruR gene or nucleotide sequences coding therefor are attenuated, in a medium; (b) enriching the medium or the cells of the microorganism in the L-amino acid, and (c) isolating the L-amino acid.
2. The process of claim 1, wherein the L-amino acid is L-threonine.
3. The process of claim 1, wherein the fruR gene or nucleotide sequences coding therefor are switched off.
4. The process of claim 1, wherein constituents of the fermentation medium and/or the biomass in its entirety or portions thereof remain in the isolated L-amino acid.
5. The process of claim 1, wherein one or more genes in the biosynthesis pathway of the L-amino acid are enhanced in the microorganism.
6. The process of claim 1, wherein the metabolic pathways that reduce the formation of the L-amino acid are at least partially switched off in the microorganism.
7. The process of claim 1, wherein the expression of the fruR gene or nucleotide sequences coding therefor is attenuated.
8. The process of claim 1, wherein the expression of the fruR gene or nucleotide sequences coding therefor is switched off.
9. The process of claim 1, wherein the regulatory and/or catalytic properties of the polypeptide for which the fruR encodes are reduced.
10. The process of claim 1, wherein in the microorganism one or more of the genes selected from the following group is enhanced: the thrABC operon coding for aspartate kinase, homoserine dehydrogenase, homoserine kinase and threonine synthase, the pyc gene coding for pyruvate carboxylase, the pps gene coding for phosphoenol pyruvate



synthase, the ppc gene coding for phosphoenol pyruvate carboxylase, the pntA and pntB genes coding for transhydrogenase, the rhtB gene imparting homoserine resistance, the mqo gene coding for malate:quinone oxidoreductase, the rhtC gene imparting threonine resistance, and the thrE gene coding for threonine export.

11. The process of claim 1, wherein in the microorganism one or more of the genes selected from the following group is overexpressed: the thrABC operon coding for aspartate kinase, homoserine dehydrogenase, homoserine kinase and threonine synthase, the pyc gene coding for pyruvate carboxylase, the pps gene coding for phosphoenol pyruvate synthase, the ppc gene coding for phosphoenol pyruvate carboxylase, the pntA and pntB genes coding for transhydrogenase, the rhtB gene imparting homoserine resistance, the mqo gene coding for malate:quinone oxidoreductase, the rhtC gene imparting threonine resistance, and the thrE gene coding for threonine export.

✓ 12. The process of claim 1, wherein in the microorganism one or more of the genes selected from the following group is attenuated: the tdh gene coding for threonine dehydrogenase, the mdh gene coding for malate dehydrogenase, the gene product of the open reading frame (orf) yjfa, the gene product of the open reading frame (orf) ytfp, the pckA gene coding for phosphoenol pyruvate carboxykinase, the poxB gene coding for pyruvate oxidase, the aceA gene coding for isocitrate lyase, and the dgsA gene coding for the regulator of the phosphotransferase system.

✓ 13. The process of claim 1, wherein in the microorganism one or more of the genes selected from the following group is switched off: the tdh gene coding for threonine dehydrogenase, the mdh gene coding for malate dehydrogenase, the gene product of the open reading frame (orf) yjfa, the gene product of the open reading frame (orf) ytfp, the pckA gene coding for phosphoenol pyruvate carboxykinase, the poxB gene coding for pyruvate oxidase, the aceA gene coding for isocitrate lyase, and the dgsA gene coding for the regulator of the phosphotransferase system.

✓ 14. The process of claim 1, wherein in the microorganism the expression of one or more of the genes selected from the following group is reduced: the tdh gene coding for threonine dehydrogenase, the mdh gene coding for malate dehydrogenase, the gene product of the open reading frame (orf) yjfa, the gene product of the open reading frame (orf) ytfp, the pckA gene coding for phosphoenol pyruvate carboxykinase, the poxB gene coding for pyruvate oxidase, the aceA gene coding for isocitrate lyase, and the dgsA gene coding for the regulator of the phosphotransferase system.

15. The process of claim 1, wherein the microorganism belongs to the genus *Escherichia*.

16. The process of claim 1, wherein the microorganism belongs to the genus *Erwinia*.

17. The process of claim 1, wherein the microorganism belongs to the genus *Providencia*.

18. The process of claim 1, wherein the microorganism belongs to the genus *Serratia*.

19. The process of claim 1, wherein the microorganism is an *E. coli*.

20. The process of claim 1, wherein the microorganism is an Enterobacteriaceae selected from the group consisting of *Escherichia coli* MG442.DELTA.aceA, *Escherichia coli* TF427, *Escherichia coli*, *Escherichia coli* KY 10935, *Escherichia coli* VNIIGenetika MG442, *Escherichia coli* VNIIGenetika M1, *Escherichia coli* VNIIGenetika 472T23, *Escherichia coli* BKIIM B-3996, *Escherichia coli* kat 13, *Escherichia coli* KCCM-10132, *Serratia marcescens* HNr21, *Serratia marcescens*, and *Serratia marcescens* T2000.

21. The process of claim 1, wherein the L-amino acid is selected from the group consisting of L-asparagine, L-serine, L-glutamate, L-glycine, L-alanine, L-cysteine, L-valine, L-methionine, L-isoleucine, L-leucine, L-tyrosine, L-phenylalanine, L-histidine, L-lysine, L-tryptophan, and L-arginine.

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10/114043

L7: Entry 12 of 24

File: PGPB

Mar 20, 2003

PGPUB-DOCUMENT-NUMBER: 20030054503  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030054503 A1

TITLE: Process for the production of L-amino acids using strains of the family enterobacteriaceae that contain an attenuated dgsA gene

PUBLICATION-DATE: March 20, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rieping, Mechthild	Bielefeld		DE	
Hermann, Thomas	Bielefeld		DE	

US-CL-CURRENT: 435/106; 435/252.33

## CLAIMS:

What is claimed is:

1. A process for the production of an L-amino acid, comprising: (a) fermenting a microorganism of the family Enterobacteriaceae which produces the desired L-amino acid, in which the dgsA gene or nucleotide sequences coding therefor are attenuated, in a medium; (b) enriching the medium or the cells of the microorganism in the L-amino acid, and (c) isolating the L-amino acid.
2. The process of claim 1, wherein the L-amino acid is L-threonine.
3. The process of claim 1, wherein the dgsA gene or nucleotide sequences coding therefor are switched off.
4. The process of claim 1, wherein constituents of the fermentation medium and/or the biomass in its entirety or portions thereof remain in the isolated L-amino acid.
5. The process of claim 1, wherein one or more genes in the biosynthesis pathway of the L-amino acid are enhanced in the microorganism.
6. The process of claim 1, wherein the metabolic pathways that reduce the formation of the L-amino acid are at least partially switched off in the microorganism.
7. The process of claim 1, wherein the expression of the dgsA gene or nucleotide sequences coding therefor is attenuated.
8. The process of claim 1, wherein the expression of the dgsA gene or nucleotide sequences coding therefor is switched off.
9. The process of claim 1, wherein the regulatory and/or catalytic properties of the polypeptide for which the dgsA encodes are reduced.
10. The process of claim 1, wherein in the microorganism one or more of the genes selected from the following group is enhanced: the thrABC operon coding for aspartate kinase, homoserine dehydrogenase, homoserine kinase and threonine synthase, the pyc gene coding for pyruvate carboxylase, the pps gene coding for phosphoenol pyruvate

synthase, the ppc gene coding for phosphoenol pyruvate carboxylase, the pntA and pntB genes coding for transhydrogenase, the rhtB gene imparting homoserine resistance, the mgo gene coding for malate:quinone oxidoreductase, the rhtC gene imparting threonine resistance, and the thrE gene coding for threonine export.

11. The process of claim 1, wherein in the microorganism one or more of the genes selected from the following group is overexpressed: the thrABC operon coding for aspartate kinase, homoserine dehydrogenase, homoserine kinase and threonine synthase, the pyc gene coding for pyruvate carboxylase, the pps gene coding for phosphoenol pyruvate synthase, the ppc gene coding for phosphoenol pyruvate carboxylase, the pntA and pntB genes coding for transhydrogenase, the rhtB gene imparting homoserine resistance, the mgo gene coding for malate:quinone oxidoreductase, the rhtC gene imparting threonine resistance, and the thrE gene coding for threonine export.

12. The process of claim 1, wherein in the microorganism one or more of the genes selected from the following group is attenuated: the tdh gene coding for threonine dehydrogenase, the mdh gene coding for malate dehydrogenase, the gene product of the open reading frame (orf) yjfA, the gene product of the open reading frame (orf) ytfp, the pckA gene coding for phosphoenol pyruvate carboxykinase, the poxB gene coding for pyruvate oxidase, the fruR gene coding for the fructose repressor, and the aceA gene coding for isocitrate lyase.

13. The process of claim 1, wherein in the microorganism one or more of the genes selected from the following group is switched off: the tdh gene coding for threonine dehydrogenase, the mdh gene coding for malate dehydrogenase, the gene product of the open reading frame (orf) yjfA, the gene product of the open reading frame (orf) ytfp, the pckA gene coding for phosphoenol pyruvate carboxykinase, the poxB gene coding for pyruvate oxidase, the fruR gene coding for the fructose repressor, and the aceA gene coding for isocitrate lyase.

14. The process of claim 1, wherein in the microorganism the expression of one or more of the genes selected from the following group is reduced: the tdh gene coding for threonine dehydrogenase, the mdh gene coding for malate dehydrogenase, the gene product of the open reading frame (orf) yjfA, the gene product of the open reading frame (orf) ytfp, the pckA gene coding for phosphoenol pyruvate carboxykinase, the poxB gene coding for pyruvate oxidase, the fruR gene coding for the fructose repressor, and the aceA gene coding for isocitrate lyase.

15. The process of claim 1, wherein the microorganism belongs to the genus *Escherichia*.

16. The process of claim 1, wherein the microorganism belongs to the genus *Erwinia*.

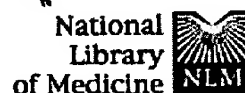
17. The process of claim 1, wherein the microorganism belongs to the genus *Providencia*.

18. The process of claim 1, wherein the microorganism belongs to the genus *Serratia*.

19. The process of claim 1, wherein the microorganism is an *E. coli*.

20. The process of claim 1, wherein the microorganism is an Enterobacteriaceae selected from the group consisting of *Escherichia coli* MG442.DELTA.aceA, *Escherichia coli* TF427, *Escherichia coli*, *Escherichia coli* KY10935, *Escherichia coli* VNIIgenetika MG442, *Escherichia coli* VNIIgenetika M1, *Escherichia coli* VNIIgenetika 472T23, *Escherichia coli* BKIIM B-3996, *Escherichia coli* kat 13, *Escherichia coli* KCCM-10132, *Serratia marcescens* HNr21, *Serratia marcescens*, and *Serratia marcescens* T2000.

21. The process of claim 1, wherein the L-amino acid is selected from the group consisting of L-asparagine, L-serine, L-glutamate, L-glycine, L-alanine, L-cysteine, L-valine, L-methionine, L-isoleucine, L-leucine, L-tyrosine, L-phenylalanine, L-histidine, L-lysine, L-tryptophan, and L-arginine.



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☐ 1: J Bacteriol. 1988 Oct;170(10):4528-36.

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## Isolation, hyperexpression, and sequencing of the *aceA* gene encoding isocitrate lyase in *Escherichia coli*.

Matsuoka M, McFadden BA.

PubMed Services

Biochemistry/Biophysics Program, Washington State University, Pullman 99164-4660.

Related Resources

A structural gene for isocitrate lyase was isolated from a cosmid containing an a locus of the *Escherichia coli* chromosome. Cloning and expression under control of the *tac* promoter in a multicopy plasmid showed that a 1.7-kilobase-pair DNA segment was sufficient for complementation of an *aceA* deletion mutation and overproduction of isocitrate lyase. DNA sequence analysis of the cloned gene and N-terminal protein sequencing of the cloned and wild-type enzymes revealed an entire *aceA* gene which encodes a 429-amino-acid residue polypeptide whose C-terminus is histidine. The deduced amino acid sequence for the 47.2-kilodalton subunit of *E. coli* isocitrate lyase could be aligned with that for the 64.8-kilodalton subunit of the castor bean enzyme with 39% identity except for limited N- and C-terminal regions and a 103-residue stretch that was unique for the plant enzyme and started approximately in the middle of that peptide.

PMID: 3049537 [PubMed - indexed for MEDLINE]

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